Art Unit: 2176

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Derek Stettner on 09/23/2008.

In the Specification, please amend the title to read as follows:

Document Creation System and Method Using a Template Structured According to a Schema

Please amend the claims as follows:

1.-24. (Cancelled)

25. (Currently Amended) A computer readable medium comprising having stored thereon:

computer executable instructions for generating instances of a document based on a template structured according to a schema, the schema comprising:

a template root element, wherein the template root element comprises:

Application/Control Number: 10/814,554

Art Unit: 2176

a template information element containing descriptive information about the template root element, wherein the descriptive information includes at least one of a title, free-form text, and a document type element to support a type element from another schema or document type definition;

a data table element configured to contain data that is used to transform an abstract instance of a document template to a concrete instance of a document template, to determine the number of instances of a document template to be replicated, and to assign a data value to a data target; and

an instances element containing at least one instance element, the instances element describing how an individual instance of the document is constructed, the instance element including an instance data table element and at least one continuations element:

wherein the continuations element is configured to define continuation handling for data included in the data table element, the instance data table element, or both, and configured to include one or more continuation elements and one or more overflow default elements; and

wherein at least one continuation element is configured to process overflows by placing data on more than one page.

26. (Previously Presented) A computer readable medium as claimed in claim 25, wherein the instance element is configurable to include an instance data table element, a pages element, an overlays element, and a continuations element.

27. (Previously Presented) A computer readable medium as claimed in claim 26, wherein the pages element is configurable to include a page element and the page element is configurable to include an overlays element and a composition element.

28. (Previously Presented) A computer readable medium as claimed in claim 26, wherein the overlays element is configurable to include one or more overlay elements.

29. (Previously Presented) A computer readable medium as claimed in claim 26, wherein the continuations element is configurable to include one or more continuation elements and one or more overflow default elements.

30. (Previously Presented) A computer readable medium as claimed in claim 26, wherein the data element is configurable to include one or more datum elements.

31. - 33. (Cancelled)

34. (Currently Amended) A computer readable medium comprising having stored thereon:

computer executable instructions that are executed by a processor and configured to generate instances of a document based on a template <u>structured</u> Application/Control Number: 10/814,554

Art Unit: 2176

according to a schema defining a data structure for the document, the data structure comprising:

a template root element that comprises:

a template information element containing descriptive information about the template root element, wherein the descriptive information includes at least one of a title, free-form text, and a document type element to support a type element from another schema or document type definition;

a data table element configured to contain data that is used to transform an abstract instance of a document template to a concrete instance of a document template, to determine the number of instances of a document template to be replicated, and to assign a data value to a data target; and

an instances element including at least one instance element configured to describe how a document is constructed, the instance element including an instance data table element and at least one continuations element:

wherein the continuations element is configured to define continuation handling for data included in the data table element, the instance data table element, or both, and configured to include one or more continuation elements and one or more overflow default elements; and

wherein at least one continuation element is configured to process overflows by placing data on more than one page.

Art Unit: 2176

35. (Previously Presented) A computer readable medium as claimed in claim 34, wherein the template information element includes descriptive information about the template root element.

- 36. (Previously Presented) A computer readable medium as claimed in claim 35, wherein the descriptive information includes a title element that contains a title for the document at hand, a description element that is a container for free-form text about the template root element, a help text element, which is a container for free-form information that may be useful to a consumer of the document, and a document type element that is provided to support a type element from other schemas or DTDs.
- 37. (Previously Presented) A computer readable medium as claimed in claim 34, wherein the template information element includes a print constraints element which is a container for special values that may be needed or used by a printing environment.
- 38. (Previously Presented) A computer readable medium as claimed in claim 34, wherein the data table element includes data values to be used in a specific instance of a template.
- 39. (Previously Presented) A computer readable medium as claimed in claim 38, wherein the data table element defines a structure of data values that can be accessed by name, or by a combination of name and one or more indices.

Art Unit: 2176

40. (Cancelled)

41. (Previously Presented) A computer readable medium as claimed in claim 34,

wherein each instance element is configurable to include a pages element, and an

overlays element.

42. (Previously Presented) A computer readable medium as claimed in claim 41,

wherein each pages element is configurable to include one or more page elements.

43. (Previously Presented) A computer readable medium as claimed in claim 42,

wherein each page element is configurable to include an overlays element and one or

more composition elements.

44. (Previously Presented) A computer readable medium as claimed in claim 43,

wherein each overlavs element may include one or more overlay elements.

45. (Previously Presented) A computer readable medium as claimed in claim 44,

wherein each continuations element is configurable to include one or more continuation

elements and one or more overflow default elements.

Application/Control Number: 10/814,554
Art Unit: 2176

46. (Previously Presented) A computer readable medium as claimed in claim 45, wherein continuation elements are configured to be used by a processor to process overflows.

47. - 51. (Cancelled)

52. (Currently Amended) A computer system comprising a processor, a memory, and a computer readable medium, the computer readable medium comprising <u>having</u> stored thereon:

computer executable instructions configured to generate instances of a document based on a template structured according to a schema, the schema comprising:

a template root element comprising:

a template information element containing descriptive information about the template root element, wherein the descriptive information includes at least one of a title, free-form text, and a document type element to support a type element from another schema or document type definition;

a data table element configured to contain data that is used to transform an abstract instance of a document template to a concrete instance of a document template to determine the number of instances of a document template to be replicated, and to assign a data value to a data target; and

an instances element describing how an individual instance of the document is constructed and containing at least one instance element, the instance element including an instance data table element and at least one continuations element:

wherein the continuations element is configured to define continuation handling for data included in the data table element, the instance data table element, or both, and configured to include one or more continuation elements and one or more overflow default elements; and

wherein at least one continuation element is configured to process overflows by placing data on more than one page.

53. (Cancelled)

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Independent claims 25, 34, and 52, have been amended above to recite "A computer readable medium <u>having stored thereon</u>..." in order to render the claimed invention statutory under 35 U.S.C. 101.

Application/Control Number: 10/814,554

Art Unit: 2176

The amendment to the claims filed 06/20/2008 added newly claimed limitations to independent claims 25, 34, and 52 claiming an arrangement of nested schema elements, including a template root element; a template information element; a data table element; an instances element including an instance element, an instance data table element, and continuations element; the continuations element including continuations and overflow default elements (claim 25).

The Mohr patent and Shiigi publication, previously relied upon for the claim rejections, did not disclose the claimed combination and structure of schema elements. A search of the prior art did not produce any disclosure of the claimed combination and structure of schema elements, and did not produce any art which would render the claimed combination of schema elements obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kim et al. U.S. Patent No. 7.080.083 issued July 2006

Art Unit: 2176

 Mogilevsky et al.
 U.S. Patent No.
 7,051,276
 issued
 May 2006

 Bata et al.
 U.S. Patent No.
 6,901,403
 issued
 May 2005

Skonnard, "The XML Files: A Quick Guide to XML Schema", MSDN Magazine, April 2002, p. 1-15.

Fallside, "XML Schema Part 0: Primer", W3C Recommendation, May 2, 2001, p. 1-64.

Clark, "XSL Transformations (XSLT) Version 1.0", W3C Recommendation, November 16, 1999, p. 1-77.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMELIA RUTLEDGE whose telephone number is (571)272-7508. The examiner can normally be reached on Monday - Friday 9:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2176

/Amelia Rutledge/ Examiner, Art Unit 2176